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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,182	01/05/2005	Kenji Sato	XA-10231	7681

181 7590 03/14/2007
MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
SUITE 500
MCLEAN, VA 22102-3833

EXAMINER

BROWN, DREW J

ART UNIT	PAPER NUMBER
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3616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/520,182

Applicant(s)

SATO ET AL.

Examiner

Drew J. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/5/05 (preliminary amendment).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 10 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/6/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 1, 2, 4, 10, and 19 are objected to because of the following informalities:
The word "improvement" should not appear in claims 1, 2, and 10.
In line 5 of claim 4 and line 4 of claim 19, "provided as said restricting portion" should be changed to --provided at said restricting portion--.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
In line 6 of claim 15, the limitation that "said restricting member is formed integrally with said car body sided lower bracket" renders the claim indefinite because it is unclear is the restricting member recited in claim 11 is different from the restricting member recited in claim 15. It appears that claim 15 should depend from claim 10 rather than claim 11.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Igarashi et al. (U.S. Pat. No. 6,345,842).

Igarashi et al. discloses a bracket (51) including a restricting portion (57) for restricting a steering position adjusting range of the steering column (Figure 2), and that the restricting portion allows, upon the secondary collision, the steering column to move beyond the steering position adjusting range (Figure 5).

The bracket includes a steering column position adjusting groove, through which a fastening member (55) of the steering column is inserted and of which one end it opened (Figure 5), and a restricting portion (top and bottom of groove 57) for restricting a steering position adjusting range of the steering column, and the restricting portion allows, upon the secondary collision, the steering column to move beyond the steering position adjusting range (Figure 5).

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nomura et al. (U.S. Pat. No. 6,631,924 B2).

Nomura et al. discloses a bracket (105) including a restricting portion (117) for restricting a steering position adjusting range of the steering column (Figures 10 and 12), and that the restricting portion allows, upon the secondary collision, the steering column to move beyond the steering position adjusting range (column 8, lines 25-35).

The bracket includes a steering column position adjusting groove, through which a fastening member (113) of the steering column is inserted and of which one end it opened (Figure 10), and a restricting portion (117) for restricting a steering position adjusting range of the steering column, and the restricting portion allows, upon the secondary collision, the steering column to move beyond the steering position adjusting range (column 8, lines 25-35). The groove serves for adjusting a tilt position of the steering column (supports the tilt bolt upon adjustment of lever 125), and a lower bracket (131) supporting the steering column through a hinge mechanism (column 7, lines 32-35) in the front of the vehicle and supported on the car body (13), is provided on a front of the vehicle side of the bracket (Figure 10). The lower

bracket includes a cut away portion (137) through which a pivot (133) of the hinge mechanism is inserted and of which a front of the vehicle side is opened (Figure 10), and the pivot comes off the open end of the cut away portion upon an axis directional input of the steering column when the secondary collision happens, and the steering column is released from the lower bracket (column 8, lines 25-35).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-6, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al. in view of Matsumoto et al. (U.S. Pub. No. 2002/0167157 A1).

Nomura et al. discloses the claimed invention as discussed above but does not disclose that a protrusion for regulating a movement of the fastening member is provided at the restricting portion within the adjusting groove. Matsumoto et al., however, does disclose that a protrusion (21b3) for regulating a movement of the fastening member is provided at the restricting portion within the adjusting groove (Figure 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Nomura et al. in view of the teachings of Matsumoto et al. to have a protrusion for regulating movement of the fastening member within the adjusting groove in order to limit an amount of adjustment that can be made, or to provide a specific force necessary to adjust the steering column to avoid unintentional adjustment. The protrusion also includes an abutting surface on the side facing the fastening member (Figure 4)

Matsumoto et al. does not disclose that the protrusion is constructed of a plurality of protrusions formed in alignment in their directions towards the front of the vehicle. However, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to construct the protrusion in a plurality of protrusions, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

10. Claims 4-6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi et al. in view of Matsumoto et al.

Igarashi et al. discloses the claimed invention as discussed above but does not disclose that a protrusion for regulating a movement of the fastening member is provided at the restricting portion within the adjusting groove. Matsumoto et al., however, does disclose that a protrusion (21b3) for regulating a movement of the fastening member is provided at the restricting portion within the adjusting groove (Figure 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Igarashi et al. in view of the teachings of Matsumoto et al. to have a protrusion for regulating movement of the fastening member within the adjusting groove in order to limit an amount of adjustment that can be made, or to provide a specific force necessary to adjust the steering column to avoid unintentional adjustment. The protrusion also includes an abutting surface on the side facing the fastening member (Figure 4)

Matsumoto et al. does not disclose that the protrusion is constructed of a plurality of protrusions formed in alignment in their directions towards the front of the vehicle. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the protrusion in a plurality of protrusions, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al. in view of Yabutsuka et al. (U.S. Pat. No. 6,378,903 B1)

Nomura et al. discloses the claimed invention as discussed above and that the restricting portion of the bracket extends substantially front and rear directions of the vehicle in a way that leaves the open end, and is formed to delimit substantially a lower portion of the position adjusting groove (Figure 10), but does not disclose that the restricting member includes a bend allowing portion for allowing the fastening member of the steering column to move towards the front of the vehicle through the open end. However, Yabutsuka et al. does disclose that the

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restricting member includes a bend allowing portion (4a) for allowing the fastening member of the steering column to move towards the front of the vehicle through the open end (Figures 5A-5D). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Nomura et al. in view of the teachings of Yabutsuka et al. to have bend allowing portions in order to control the amount of force necessary to allow the tilt axis bolt to exit the restricting portion.

Allowable Subject Matter

12. Claims 10-14 are allowed. The examiner notes that claim 10 should be amended to overcome the objection as discussed above.
13. Claims 8, 9, and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
14. Claims 15-18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kinoshita et al., Nakamura, Ikeda et al., Yamamura, Sawada et al., and Sato et al. disclose similar steering columns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Drew J. Brown
Examiner
Art Unit 3616

db
3/8/07

 3/12/07
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